## Corridor 15-104

Honey Lake Corridor

## Corridor Purpose and Rationale

The corridor runs north-south along Highway 395. The corridor connects multiple Section 368 energy corridors, creating a continuous corridor network across BLM- and USFS-administered lands between Reno, Nevada, and California. The corridor provides a link to the Reno area where renewable energy is in demand. Input regarding alignment from the Western Utility Group during the WWEC PEIS suggested following this route. There is an application for a gen-tie transmission line to connect the proposed Fish Springs Solar Project (a PV solar project that would be constructed on private lands) to the existing transmission line within the corridor. The proposed Bordertown to California 120 kV Transmission Line would be located at the substation at MP 5 and would utilize approximately 0.4 miles of the corridor. Future development within the corridor could be limited between MP 107 and MP 114 because of the reduced corridor width.

## Corridor location:

California (Lassen and Sierra Co.); Nevada (Washoe Co.)
BLM: Applegate, Eagle Lake, and Sierra
Front Field Offices
USFS: Humboldt-Toiyabe NF
Regional Review Region: Region 5

## Corridor width, length:

Width 500 ft in Applegate FO; 3,500 ft in rest
51 miles of designated corridor
114 miles of posted route, including gaps

## Designated Use:

- corridor is multi-modal


## Corridor of concern (N)



## Corridor history:

- Locally designated prior to 2009 (N)
- Existing infrastructure (Y)
- A $345-\mathrm{kV}$ transmission line is within or adjacent to the entire length of the corridor. Two 345-kV transmission lines follow a portion of the corridor.
- A natural gas pipeline is within and adjacent to a portion of the corridor
- Highway 395 runs within and adjacent to portions of the corridor.
- Energy potential near the corridor (Y)
- 2 power plants are within 2 mi (biomass and geothermal).
- 1 substation is within the corridor and 11 more substations are within 5 mi of the corridor.
- Corridor changes since 2009 (N)

Figure 1. Corridor 15-104


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__Transmission Line *
    - Pipeline *
    - Substation *
    \Delta Renewable Power Plant
    A Non-Renewable Power Plant
Abstract Corridor
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```Other Section 368 Energy Corridor Solar Energy Zone
*)Data soure: © 2018 S&P
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| Surface Management Agency |  |
| :--- | :--- |
|  | Bureau of Land Management |
|  | Bureau of Reclamation |
|  | U.S. Department of Defense |
|  | U.S. Department of Energy |
|  | U.S. Fish and Wildlife Service |
|  | Local |
|  | National Park Service |
|  | Other |
|  | State |
|  | U.S. Forest Service |

Keys for Figures 1 and 2
Figure 2. Corridor 15-104 and nearby electric transmission lines and pipelines

## Conflict Map Analysis



Figure 3. Map of Conflict Areas in Vicinity of Corridor 15-104

Figure 3 reflects a comprehensive resource conflict assessment developed to enable the Agencies and stakeholders to visualize a corridor's proximity to environmentally sensitive areas and to evaluate options for routes with lower potential conflict. The potential conflict assessment (low, medium, high) shown in the figure is based on criteria found on the WWEC Information Center at www.corridoreis.anl.gov. To meet the intent of the Energy Policy Act and the Settlement Agreement siting principles, corridors may be located in areas where there is potentially high resource conflict; however, where feasible, opportunity for corridor revisions should be identified in areas with potentially lower conflict.

Visit the 368 Mapper for a full view of the potential conflict map
(https://bogi.evs.anl.gov/section368/portal/)


Figure 4. Corridor 15-104, Corridor Density Map
Figure 4 shows the density of energy use to assist in evaluating corridor utility. ROWs granted prior to the corridor designation (2009) are shown in pink; ROWs granted after corridor designation are shown in blue; and pending ROWs under current review for approval are shown in turquoise. Note the ROW density shown for the corridor is only a snapshot that does not fully illustrate remaining corridor capacity. Not all ROWs have GIS data at the time this abstract was developed. BLM and USFS are currently improving their ROW GIS databases and anticipate more complete data in the near future.

## Corridor Review Table

Designated energy corridors are areas of land prioritized for energy transmission infrastructure and are intended to be predominantly managed for multiple energy transmission infrastructure lines. Other compatible uses are allowable as specified or practicable. Resource management goals and objectives should be compatible with the desired future conditions of the energy transmission corridor. Land management objectives that do not align with desired future conditions (i.e., responsible linear infrastructure development of the corridor with minimal impacts) should be avoided. The table below identifies serious concerns or issues and presents potential resolution options to better meet corridor siting principles.

The preliminary information below is provided to facilitate further discussion and input prior to developing potential revisions, deletions, or additions.

| CORRIDOR 15-104 REVIEW |  |  |  |
| :---: | :---: | :---: | :---: |
| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | $\begin{aligned} & \text { MILEPOST } \\ & (\mathrm{MP})^{1} \end{aligned}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| USFS Jurisdiction: Humboldt-Toiyabe National Forest <br> Agency Land Use Plan: Toiyabe NF LMP 1986 |  |  |  |
| VQO area - Modification and the corridor intersect and are adjacent. The LMP states that management objectives for Modification means that management practices may dominate the landscape but activities should appear as natural occurrences in the fore- and middle-ground. | MP 0 to MP 1 |  | Only a small sliver of the VQO is located in the corridor and the corridor is collocated with existing infrastructure (minimizing impacts). However, shifting a portion of the corridor to the northeast side of Highway 395 at this location would avoid the VQO area while maintaining the corridor width on federal land (the shift would move corridor from USFS lands onto additional BLMadministered lands). |
| California NHT and the corridor intersect - The LMP pre-dates the establishment of the NHTs and does not have specific guidance or objectives. | MP 0 to MP 2 | The National Trails System Act, as cited in the Comprehensive Plan for the California NHT (1999) ${ }^{3}$, states that the Secretary of the Interior or the Secretary of Agriculture may grant easements and rights-of-way upon, over, under, across, or along any component of the national trails system in accordance with the laws applicable to the national forest system, provided that any conditions contained in such easements and rights-of-way are related to the policy and purposes of this Act. | Only a small section of the NHT is located in the corridor. A portion of the corridor could be shifted to the northeast to avoid the NHT while maintaining the corridor width. Overall, the conflict with the NHT is minimized considering the existing infrastructure and the minimal area of intersection. <br> Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor. |
| ROS: Roaded Natural and the corridor intersect Areas under this ROS class may have resource | MP 0 to MP 3 |  | The corridor appears to best meet the siting principles because of collocation with existing infrastructure |


| CORRIDOR 15-104 REVIEW |  |  |  |
| :---: | :---: | :---: | :---: |
| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | $\begin{aligned} & \text { MILEPOST } \\ & (\mathrm{MP})^{1} \\ & \hline \end{aligned}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| modification and utilization practices evident, but harmonized with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities. |  |  | (minimizing further visual disturbance) and the absence of more preferable alternatives. |
| BLM Jurisdiction: Sierra Front Field Office <br> Agency Land Use Plan: Carson City FO Consolidated RMP (2001) |  |  |  |
| The Peavine Ranch NRHP site and the corridor intersect - Peavine Ranch was listed on the National Register of Historic Places in 2000, but the RMP does not include Peavine Ranch as a special designation NRHP site. | MP 0 | Section 106 of the NHPA requires federal agencies to consider the effects of an undertaking on cultural resources listed on the NRHP. | There is available space within the corridor that would allow the NRHP site to be avoided while still locating infrastructure within the corridor. Shifting the corridor at this location would avoid the NRHP site while maintaining the corridor width on federal lands. |
| Webber's Ivesia (ESA-listed threatened) critical habitat and the corridor intersect - The RMP predates the listing of this species and does not have specific guidance or objectives. | MP 10 and MP 26 | Critical habitat for Webber's Ivesia was designated in 2014. <br> An existing transmission line in the center of the corridor is adjacent to the critical habitat (MP 10) or slightly intersects it (MP 26). <br> RFI comment: consult with USFWS to avoid adverse modification to Webber's Ivesia designated critical habitat. | There is available space within the corridor east of the transmission line that would allow the critical habitat to be avoided while still locating infrastructure within the corridor. Shifting the corridor to the edge of the existing transmission line at these locations would avoid the critical habitat while maintaining the corridor width on federal lands. |
| BLM Jurisdiction: Eagle Lake Field Office Agency Land Use Plan: ROD Eagle Lake (2008) |  |  |  |
| Fort Sage CA SRMA (OHV Area) and the corridor intersect - The RMP does not prescribe ROW avoidance or exclusions within the SRMA. | MP 40 to MP 44 |  | The corridor appears to best meet the siting principles. There are no management prescriptions that would preclude future development within the corridor. It is possible to shift the corridor slightly to more closely follow the existing transmission line and decrease the area of intersections with SRMA. However, the SRMA could not be completely avoided. |
| VRM Class II area intersects the corridor - The objective of VRM Class II designation is to retain the existing character of the landscape. | MP 71 to MP 73 |  | Areas with the VRM Class II designation may not be compatible with future overhead transmission line development; however, the corridor is collocated with an existing transmission line. The agencies could consider |

## CORRIDOR 15-104 REVIEW

| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | MILEPOST <br> (MP) ${ }^{1}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| :---: | :---: | :---: | :---: |
|  |  |  | shifting the corridor to the west so that the existing transmission line would be the eastern boundary of the corridor. This would minimize, but not eliminate, the intersection with the VRM Class II area, and allow future infrastructure to be located in the portion of the corridor outside of the VRM Class II area. A change in the VRM class within the corridor could also be considered. |
| California NHT (Nobles Emigrant Trail) and the corridor intersect - The NPS indicates that this is within a NHT high potential segment. <br> RMP states that all projects proposed along the Nobles Emigrant Trail will be reviewed to assure that the VRM objectives for public lands seen along the trail are met (most foreground-middle ground areas within 3 to 5 miles of the trail are VRM Class II). | MP 72 to MP 73 | The intersection with the trail at this location is tangential (the corridor does not run parallel to the NHT). <br> The National Trails System Act, as cited in the Comprehensive Plan for the California NHT (1999) ${ }^{3}$, states that the Secretary of the Interior or the Secretary of Agriculture may grant easements and rights-of-way upon, over, under, across, or along any component of the national trails system in accordance with the laws applicable to the national forest system, provided that any conditions contained in such easements and rights-of-way are related to the policy and purposes of this Act. <br> For high potential route segments, the National Trails System Act states: Federally owned sites and segments of these trails are considered federal protection components and should receive special attention by managing agencies to enhance their trailrelated values. | NHT high potential segments may not be compatible with the corridor's purpose as a preferred location for energy infrastructure. However, collocation with existing infrastructure minimizes disturbance to other resources. In this location, the corridor crosses and does not follow the NHT, minimizing potential impacts on the trail. Existing infrastructure, minimal crossing overlap and the absence of more preferable alternatives suggest that the corridor cannot be relocated to a more preferred area for development. <br> Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor. |

## CORRIDOR 15-104 REVIEW

| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | $\begin{aligned} & \text { MILEPOST } \\ & (\mathrm{MP})^{1} \\ & \hline \end{aligned}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| :---: | :---: | :---: | :---: |
| BLM Jurisdiction: Applegate Field Office Agency Land Use Plan: Alturas RMP (2008) |  |  |  |
| Other than the GRSG GHMA and PHMA intersections discussed below, no issues related to resource intersections with the corridor in the Applegate FO have been identified. |  | Comment on abstract: reduce corridor width between MP 0 and MP 100 to 500 ft . for consistency with segments through BLM Applegate FO. | Maintaining the higher width for the corridor may be environmentally preferable, because it allows avoidance of more sensitive areas within the corridor if they are identified during project-level planning. |
| BLM Jurisdiction: Carson City and Northern California DOs <br> Agency Land Use Plan: Nevada and Northeastern California GRSG ROD and ARMPA -March 2019 |  |  |  |
| GRSG GHMA (ROW avoidance area) and the corridor intersect - The 2019 ARMPA indicates that PHMA and GHMA areas are designated as major pipeline ( $\geq 24$-inch diameter) ROW avoidance areas, unless the major pipeline meets one of the allocation exception criteria outlined (in MD SSS 5). The ARMPA also states that collocating new infrastructure within or next to existing infrastructure is a priority when PHMA and GHMA areas cannot be avoided. | MP 10 to MP 20, MP 22 to MP 23, MP 26 to MP 27, MP 29 to MP 32, MP 37, MP 67 to MP 70, MP 88 to MP 95, MP 101, MP 104, MP 107 to MP 109, and MP 114 | RFI comment: re-route or exclude new infrastructure ROWs and avoid all new energy infrastructure development within GRSG PACs (52\% overlap). Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within four miles of important GRSG breeding areas. | ROW avoidance areas are not compatible with the corridor's purpose as a preferred location for infrastructure. However, the corridor is collocated with an existing transmission line, minimizing disturbance to GHMA. A pipeline, transmission line, and highway also follow portions of the corridor. The GHMA encompasses a broad area surrounding the corridor which cannot be avoided. |
| GRSG PHMA (ROW avoidance area) and the corridor intersect - The 2019 ARMPA indicates that PHMA and GHMA areas are designated as major pipeline ( $\geq 24$-inch diameter) ROW avoidance areas, unless the major pipeline meets one of the allocation exception criteria outlined (in MD SSS 5). The ARMPA also states that collocating new infrastructure within or next to existing infrastructure is a priority when PHMA and GHMA areas cannot be avoided. | MP 32 to MP 37, MP 70 to MP 88, and MP 95 to MP 100 | RFI comment: re-route or exclude new infrastructure ROWs and avoid all new energy infrastructure development within GRSG PACs (52\% overlap). Use full mitigation hierarchy to avoid, minimize, and compensate for impacts within four miles of important GRSG breeding areas. <br> Comment on abstract: corridor crosses PHMA. Consider an alternative where the corridor avoids GRSG habitat to avoid and minimize impacts. | ROW avoidance areas are not compatible with the corridor's purpose as a preferred location for infrastructure. However, the corridor is collocated with an existing transmission line, minimizing disturbance to PHMA. A pipeline, transmission line, and highway also follow portions of the corridor. The PHMA encompasses a broad area surrounding the corridor which cannot be avoided. |
| USFS Jurisdiction: Humboldt-Toiyabe National Forest Agency Land Use Plan: Forest Service GRSG ROD for Idaho and Southwest Montana, Nevada, and Utah (Sept 2015); LMPA Toiyabe NF |  |  |  |
| The corridor does not intersect with GHMAs or PHMAs. |  |  |  |

${ }^{1}$ Mileposts are rounded to the nearest mile.
${ }^{2}$ Siting Principles include: Corridors are thoughtfully sited to provide maximum utility and minimum impact on the environment; Corridors promote efficient use of landscape for necessary development; Appropriate and acceptable uses are defined for specific corridors; and Corridors provide connectivity to renewable energy generation to the maximum extent possible, while also considering other generation, in order to balance the renewable sources and to ensure the safety and reliability of electricity transmission. Projects proposed in the corridor would be reviewed during their ROW application review process and would adhere to Federal laws, regulations, and policy.
${ }^{3}$ Full Title: Comprehensive Management and Use Plan / Final Environmental Impact Statement - California National Historic Trail and Pony Express National Historic Trail. Management and Use Plan Update/Final Environmental Impact Statement - Oregon National Historic Trail and Mormon Pioneer National Historic Trail.

## Additional Compatibility Concerns

The issues and concerns listed below are not explicitly addressed through agency land use plans or are too general in nature to be addressed without further clarification. Although difficult to quantify, the concerns listed have potential to affect future use and/or development within this designated corridor. The Agencies have provided a preliminary general analysis to clarify its purview. The information below is provided to facilitate further discussion during stakeholder review.

## Jurisdictional Concern:

- The corridor crosses locations, mainly in the south, that include rural areas and more densely populated unincorporated towns.

Analysis: Section 368 energy corridors are only designated on BLM- and USFS-administered lands. It is possible that future infrastructure could potentially be selectively located within the corridor to minimize intersections with private land and unincorporated towns. The Agencies could consider shifting the corridor to the northeast from MP 36 to MP 37 to include more BLM-administered lands.

## Visual Resources:

- The residents are accustomed to the scenery in the area, particularly the Peterson Mountains, which get a lot of dispersed recreation. The Peterson Mountains also have potential lands with wilderness characteristic values.

Analysis: Section 368 energy corridors were designated to provide long-distance pathways for electrical transmission and pipelines while minimizing impacts from proliferation of energy ROWs across Federal lands. Corridors are often collocated with existing infrastructure to minimize impacts on resources, including recreation. Adherence to existing IOPs for visual resources would be required.

## Ecology:

- Certain areas that the corridor crosses, mainly in the north, have been greatly affected by wildfire. Loss of native plants (sage brush and native grasses) and invasive species (cheatgrass) are major problems.
- The corridor also crosses an area with a large amount of big game migration in the winter.

Analysis: Existing IOPs and BMPs would be required. In general, the corridor follows existing infrastructure, minimizing disturbance. In addition, BLM Instruction Memorandum No. 2018-070 provides guidance to state/district/field offices on vegetation management to establish sound Integrated

Vegetation Management practices in electric utility corridors, including coordination between Federal land management agencies and utility companies that hold ROWs. The Agencies could consider an IOP for habitat connectivity so that transmission projects within Section 368 energy corridors are sited and designed in a manner that minimizes impacts on habitat connectivity.

## Military and Civilian Aviation:

- MTR - Slow-speed Route and the corridor intersect from MP 10 to MP 12.
- MTR - VR and the corridor intersect from MP 29 to MP 34, MP 36 to MP 39 and MP 40 to MP 41.

Analysis: Adherence to existing IOP regarding coordination with DoD would be required. Agencies could consider a revision to the existing IOP to include height restrictions for corridors in the vicinity of DoD training routes.

## Abstract Acronyms and Abbreviations

ARMPA = Approved Resource Management Plan Amendment; BLM = Bureau of Land Management; BMP = best management practice; DoD = Department of Defense; ESA = Endangered Species Act; FO = Field Office; GHMA = general habitat management area; GIS = geographic information system; GRSG = Greater Sage-grouse; IOP = interagency operating procedure; LMP = land management plan; MP = milepost; MTR = Military Training Route; NF = National Forest; NHPA = National Historic Preservation Act; NHT = National Historic Trail; NRHP = National Register of Historic Places; OHV = off highway vehicle; PAC = Priority Areas for Conservation; PEIS = Programmatic Environmental Impact Statement; PHMA = priority habitat management area; RFI = request for information; RMP = resource management plan; ROD = Record of Decision; ROS = recreation opportunity spectrum; ROW = right-of-way; SRMA = Special Recreation Management Area; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; $V Q O=$ visual quality objective; $V R=$ visual route; VRM $=$ visual resource management; WWEC $=$ West-wide Energy Corridor .

